



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/581,590	06/02/2006	Ryoko Kitano	4414.P0691US	6992
23474 7590 05/22/2008 FLYNN THIEL BOUTELL & TANIS, P.C. 2026 RAMBLING ROAD KALAMAZOO, MI 49008-1631				
EXAMINER MCNALLY, DANIEL				
ART UNIT		PAPER NUMBER		
1791				
MAIL DATE		DELIVERY MODE		
05/22/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/581,590

Applicant(s)

KITANO ET AL.

Examiner

DANIEL MCNALLY

Art Unit

1791

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3 and 5 is/are allowed.
- 6) ☒ Claim(s) 1, 2 and 4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 June 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-850)
- Paper No(s)/Mail Date 6/2/2006.

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Drawings

1. Figures 12(A) and 12(B) should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The disclosure is objected to because of the following informalities: The body of the specification refers to claims by number, for example paragraph 0019 refers to claim 1, paragraph 0020 refers to claim 2, paragraph 0021 refers to claim 3, paragraph 0022 refers to claim 4, and paragraph 0023 refers to claim 5. It is recommended the applicant removes all references to the claims by number from the specification.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1 and 2 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1 and 2 recite "placing a lower disk on a *plurality* of upper and lower disks placing jigs" and "placing an upper disk on the upper and lower disks placing jigs on which the lower disk is placed." It is unclear if the lower disk is placed on a plurality of jigs or on a single upper and lower disk placing jigs. It appears a plurality of upper and lower disks placing jigs are provided around the circumference of the rotating table, however a single lower disk can only be placed on a single upper and lower disks placing jigs and not a plurality of upper and lower disks placing jigs. It is recommended clarifying that the lower disk is placed on an upper and lower disks placing jigs by removing the language directed toward a plurality of jigs.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art in view of Kanashima et al. [US6231705].

Applicant's Admitted Prior Art discloses a method and apparatus for producing optical disks. A conventional optical disk laminating device is shown in Figure 12(A) and discussed in paragraphs 0008-0014 of the specification. The method comprises placing

Art Unit: 1791

a lower disk (D2) onto a rotating table (100) by a transfer unit (102), placing an upper disk (D1) onto the rotating table by a transfer arm (101), applying an adhesive from a dispenser (103) onto the upper disk, reversing the upper disk, applying an adhesive from a dispenser (105) onto the lower disk, stacking the disks, transferring the disks by a transfer arm (200) to a rotating stand (300) for spreading the adhesive, and transferring the disks to a UV irradiating table (400) where the adhesive is cured. The Admitted prior art does not disclose placing the upper and lower disks on jigs to hold the disks spaced apart, and applying adhesive using a nozzle placed between the upper and lower disks.

Kanashima discloses a method and apparatus for laminating disks. The method comprises providing upper and lower boards (10,10) or "disks" face to face with a narrow gap there between, as shown in Figure 1, inserting an adhesive injection nozzle into the narrow gap, discharging an adhesive from the nozzle so that the adhesive contacts both of the boards, removing the nozzle from the gap, moving the boards towards each other so that the adhesive is spread, spinning the boards and curing the adhesive between the boards column 8, line 60 – column 9, line 10; column 9, line 60 – column 10, line 15). Dispensing the adhesive by inserting a nozzle between spaced apart boards allows for the adhesive to be dispensed in a single step, eliminating the need for multiple dispensing steps, and the dispensing method also reduces the presences of air bubbles in the adhesive layer between the boards.

It would have been obvious to one of ordinary skill in the art at the time of invention to modify the method and apparatus of the Admitted Prior Art by providing the

disks with a gap there between and inserting a nozzle into the gap so that adhesive is dispensed from the nozzle and contacts both of the disks as taught by Kanashima in order to reduce the number of production steps and reduce the occurrence of air bubbles in the adhesive layer.

With regard to claim 4, the Admitted Prior Art as discussed above discloses a lower disk supplying unit, a rotating table, an upper disk supplying unit, an adhesive dispensing nozzle, a stacked disk transfer device, a rotating stand for spreading and a light irradiating table. Kanashima teaches using board holding devices or "jigs" to hold the disks spaced apart, so that an adhesive dispensing nozzle can be placed in the gap, wherein both of the holding devices are movable toward each other and a capable of holding the disks by sucking up a vacuum (column 12, lines 45-64).

Allowable Subject Matter

7. Claim 1 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.
8. Claims 3 and 5 are allowed.
9. The following is a statement of reasons for the indication of allowable subject matter: Claim 1 requires providing the upper and lower disks on the disks placing jigs, dispensing adhesive onto an upper disk, reversing the upper disk, dispensing adhesive on the lower disk and stacking the disks. The admitted prior art disclose placing the disks on the rotating table rather than the placing jigs and performing the subsequent processing steps. The prior art of record does not teach providing the disks in a spaced apart arrangement and performing the claimed adhesive dispensing steps. The closest

Art Unit: 1791

prior art Kanashima teaches providing the disks in a spaced apart relationship, but does not disclose performing the claimed adhesive dispensing steps, rather Kanashima discloses inserting a nozzle between the disks and dispensing the adhesive. One of ordinary skill in the art would not have been motivated to provide the disks in a spaced apart relationship on jigs and performing the claimed adhesive dispensing steps. With regard to claim 3, the apparatus to perform the method of claim 1 is not disclosed by the prior art. Claim 3 is allowable for the same reasons claim 1 is allowable. Claim 5 depends from claim 3 and requires all of the limitations of claim 3.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Miller [US6273167] discloses a disc laminating device capable of supporting a label on a lower support surface, supporting a disc substrate on an upper support surface, wherein the upper surface is movable so that the disc substrate can be laminated to the label on the lower support surface.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL MCNALLY whose telephone number is (571)272-2685. The examiner can normally be reached on Monday - Friday 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone

Art Unit: 1791

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Daniel McNally/
Examiner, Art Unit 1791

/Jeff H. Aftergut/
Primary Examiner, Art Unit 1791

/DPM/
May 14, 2008